The Veterinary Record.

(*Founded by William Hunting, F.R.C.V.S., 1888.*)

No. 49. DECEMBER 5, 1925. Vol. 5.

Organisation of the Remount Service and Its Duties in Peace and War.*

A Lecture delivered at the London School of Economics by a Member of the Remount Directorate.

Organisation.

The Remount Directorate of the War Office, consisting of the Director of Remounts and three Deputy-Assistant Directors of Remounts, with clerical staff, forms part of the Q.M.G.'s Department, and is officially known as Q.M.G.4.

Duties in Peace.

The duties of the directorate can be roughly divided into three, as follows:—

(*a*) Supply and maintenance of suitable animals in all units of the army at home and abroad, exclusive of India.

(*b*) Preparation in peace for the provision of animals to complete the army to war establishments on mobilisation.

(*c*) Light horse breeding.

With regard to (*a*) this consists mainly of supplying animals to replace wastage. The average wastage works out at 15 per cent. of the total establishment of chargers, and 10 per cent. in other classes. It will, therefore, be seen that the average military life of a charger is between 6 and 7 years, and that of a troop horse 10 years.

The Director of Remounts decides on the number of animals, by classes, which will be required to replace wastage, and the purchasing is carried out by two regular buyers whose duties are divided as follows:—

Inspector of Remounts (*Cavalry*).—Purchase of chargers and riders for all arms of the Service except artillery.

Inspector of Remounts (*Artillery*).—Purchase of chargers, riders and draught horses for artillery, and draught animals for all other arms.

Both these buyers are retired officers, a condition which applies to all officers employed by the Remount Directorate with the exception of the Director of Remounts and two D.A.Ds.R. at the War Office. The buyers, in addition to their purchasing duties, are respectively in charge of the two Remount Depôts which are kept open in peace time, viz., Melton Mowbray, under Inspector of Remounts (Cavalry), and Arborfield Cross, near Reading, under Inspector of Remounts (Artillery). Owing to the absence of the buyers for considerable periods on purchasing duties, there is a superintendent at each depôt, under whom the routine work is carried on. Horses, when bought, are as a general rule sent to depôts, and when fit for issue are drafted to units as required.

The War Office has recently taken over from the Ministry of Agriculture control of their Light Horse Breeding Scheme for the British Isles and, with the view of encouraging English breeders, the policy is to buy as many horses in England as possible, thereby reducing the number imported from Ireland. The aim is to buy direct from the breeder in preference to dealers, a policy which adds considerably to the difficulties of buying, entailing as it does much more travelling on the part of the purchasers and the necessity for a system of locating animals likely to prove suitable for the army: the advantage to the breeder is obvious, as he obtains a far better price from the army purchaser than from the dealer. The operation of the above system is in many cases handicapped by the inability of owners and breeders to realise the various types of horse that are suitable for military requirements, but a more general knowledge is being fostered by means of exhibition classes at various horse shows, by propaganda on the part of District Remount Officers and by the circulation of a pamphlet describing and illustrating the different types required.

Issue of Chargers.

The scale of allowances of chargers and forage is laid down in Section 15, Allowance Regulations, and the conditions on which chargers are issued will be found in Section 14, Allowance Regulations. Application for the issue of a government charger is made to the War Office on Army Form B 226, which should give the height and weight of the officer and the class of horse he requires. I must emphasise the point that chargers are in the first place issued for "Military Purposes" only, which also includes hacking. The charger, after issue, may be registered for G.P. or H.P. on certain conditions which will be gone into later.

Owing to the limited staff available at remount depôts the majority of chargers issued are absolutely untrained from a military point of view, and it is sometimes difficult in the depôt to give horses even sufficient exercise to keep them in health. It is therefore necessary for units to realise that animals on first issue from a depôt are seldom in hard condition, and in the case of G.P. chargers it is not likely that they will be fit to be immediately hunted. Units have also to remember that the onus of training remounts for military purposes is on them, and that no horse should be permitted to be used for general purposes until it has been passed as trained. It is realised that the training question is a difficult one in the case of dismounted units which have no horse-training staff, and every effort is made to issue to such units animals that have had a certain amount of suitable training. When necessary, horses can usually be attached to some mounted unit for a period of training.

* Published by H.M. Stationery Office.

G.P. AND H.P.

The conditions under which a charger may be used for General Purposes and on the Hire Purchase System, are contained in paragraphs 479-487, Allowance Regulations, and the chief points are as follows :—

(*a*) The C.O. is responsible that no charger is used for G.P. or H.P. until it is 6 years old, and is passed by him as fully trained in every respect, and that the first quarter's instalment of hire fee has been paid (para. 483, Allowance Regulations).

(*b*) The annual hire fee for chargers is £12, and for cobs £8 10s., these sums being payable by quarterly instalments in advance, and covering all risks except accidents caused by culpable negligence. The privilege of hiring for general purposes applies to all stations at home and abroad.

A charger that has once been taken for G.P. cannot be re-classified " M.P." until it has been held under the former category for at least twelve months, and then only subject to approval by the War Office.

(*c*) *Hire Purchase.*—This scheme was brought out in 1922, and the conditions are laid down in para. 480 (*b*), Allowance Regulations. The scheme allows officers to purchase their chargers on payment of four annual instalments, the price of the horse being assessed from the value entered on its cost accounting card (Army Form W 7508). In all cases the sum paid annually is less than a quarter of the horse's assessed value.

The only variation is in the case of horses purchased before the Armistice.

When the cost accounting scheme was instituted, all chargers were valued at a flat rate of £75 and cobs at £60. It was, therefore, decided in view of the enhanced value of horses that when assessing the value of a pre-armistice charger or cob for hire purchase, the sum of £25 and £10 respectively must be added to the recorded value.

After four years and four annual payments the horse becomes the property of the officer, but he cannot dispose of it until after a further period of three years, during which time it must be used as his private charger unless certified unfit. Under certain conditions (*e.g.*, if an officer retires, etc., before completing the four years), he is allowed, on payment of the outstanding balance due, to purchase the horse outright, and it then becomes his absolute property. If he does not wish to complete the purchase, he must give up all claim, and either refund or be refunded the difference between the instalments paid and the amount he would have paid had the horse been registered for G.P. only.

A hire-purchase charger can be used in exactly the same manner as a G.P. horse, with the exception that the hire-purchase scheme does not apply to stations outside Great Britain and Northern Ireland.

(*d*) G.P. and H.P. chargers may be used for any legitimate purpose except racing (other than point-to-point) and heavy harness work. Point-to-point racing is allowed up to four races a season. Horses in these categories may be used for hunting and show-jumping, but not for polo as well. Provided they are not taken away from the station, they may be lent by the hirer to another officer for hunting.

TABLE TO ILLUSTRATE THE AMOUNTS PAYABLE QUARTERLY FOR A HORSE TAKEN OUT ON THE H.P. SYSTEM.

Card value of horse—	Annual Payments. £
Over £120	28
£110 to £120	23
£90 to £110	18
£60 to £90	15
Under £60	10

PRIVATE CHARGERS.

If an officer so desires, he may use as a charger a horse which is his own private property in lieu of one issued by the Government. A privately-owned charger will be stabled and foraged at government expense. Other conditions are :—

(*a*) It must be certified by a veterinary officer as sound and fit for service, and by the C.O. as suitable for military duty.

(*b*) It cannot be exchanged for a government charger until it has been on the strength for at least twelve months unless certified as unsound by a veterinary officer.

(*c*) A private charger cannot be taken as such on active service, but will, if the officer so desires, be taken over by the Government at a valuation on mobilisation provided that it is passed as fit by a board of officers.

It might interest you to know that at present in the United Kingdom there are :—

Private chargers	382
M.P. ,,	1,084
G.P. ,,	548
H.P. ,,	109
	2,123

PURCHASE OF TROOP HORSES FROM THE RANKS.

Officers may, if they so desire, purchase as chargers troop horses from the ranks up to the number for which they are entitled to forage, provided that this number does not exceed two. It must be borne in mind that the price demanded in every case is not the card value, but the cost of replacement. We have lately had several applications for officers to purchase from the ranks horses whose card value is shown as £12. We have had to reply that the purchase price would be in the neighbourhood of £60. This may seem unfair, but the horse purchased by the officer has to be replaced, and no doubt the card value in many cases is far below the actual value of the horse.

There are certain conditions governing the purchase of horses from the ranks, the first of which is that they cannot be disposed of until four years after purchase. If before that date the officer retires or is ordered abroad, the animal, if fit, may be bought back by the Government at troop-horse price, provided that it is not more than seven years old. Should it be over seven and under ten years, a deduction of £5 for each year is made in excess of seven. Should the horse be unsound or otherwise unfit, it may be cast and sold

like other government horses and the amount realised handed over to the officer.

USE OF TROOP HORSES FOR POLO.

This concession was granted under Army Order 202 of 1922, at first only as an experimental measure, but since it has been found a success the scheme has now been put on a permanent basis.

The chief points are as follows:—(i.) Payment is made at the rate of £4 a season for each horse. (ii.) The horses must always be available for military duty. (iii.) The use of horses is confined to the units to which they belong. (iv.) They are not to be taken away from the station or played in first-class tournaments. (v.) They must be at least six years of age and passed by the veterinary officer as fit and by the C.O. as sufficiently trained.

USE OF TROOP HORSES FOR DRAG, STAG AND FOX-HUNTING.

In 1923 it was decided as an experiment to allow troop horses to be used for hunting with recognised packs of drag-hounds. The scheme was open equally to mounted and dismounted officers, who were called upon to pay 10s. a month for the use of an animal from the ranks. Certain restrictions were imposed to safeguard the interests of the State, and the C.O. of the unit to which the hired animal belonged had at any time the power to withdraw it if he considered that it was losing condition or was unsuitable for the work.

The animals were kept under the supervision of veterinary officers, who compiled careful statistics regarding sickness or injuries caused by hunting.

As a result of the financial success of this scheme and partly because the packs of drag hounds were so limited in number as to provide recreation only for officers quartered in three or four stations, the scheme has been extended to include stag and fox-hunting. Hunt clubs are formed with the co-operation of O.Cs. mounted units, and horses are loaned to officers at a charge of 15s. a month. Final reports will be rendered by commands at the end of the hunting season as to the success or otherwise of this scheme. So far as we have heard it is greatly appreciated by everyone, and we hope that when the final reports are received they will show that no loss has been incurred by the public. If this is so, there is every chance of the scheme being made permanent.

REPLACEMENTS.

Replacements are necessary when units become short of horses either from death or from casting. Deficiencies are shown in a return (Army Form B 2087) rendered by units every month. This return is carefully scrutinised at the War Office, and horses are ordered out from depôts to make units up to establishment as required. We are often asked to supply animals of a certain colour and wherever possible we endeavour to provide them.

CASTING.

We now come to the means of getting rid of unserviceable or unsuitable horses, called in the army "casting." The procedure as to casting is laid down in para. 1523, King's Regulations, 1923. Castings normally take place at the end of the training season, and come under the following three categories:—

(*a*) Old and worn-out horses.
(*b*) Unsound or sick horses—these are veterinary cases.
(*c*) "Remount" cases.

Of these (*a*) and (*b*) are normal cases and the local divisional or brigade commander is the casting authority, provided in the case of (*a*) that the animal is at least fifteen years old and not considered fit for one month's field service. Should it be under fifteen years, it comes under category (*c*). Cases under this heading can only be cast on the authority of the Director of Remounts, and include horses which have failed to develop, and those recommended for casting owing to vice or unsuitability.

DISPOSAL OF CAST HORSES.

Cast horses are sold as soon as possible by public auction and a reserve price of £8 is put on each horse; in the event of the reserve price not being reached, the animal is destroyed under command arrangements, and the carcase disposed of, generally for human consumption. The price paid by the contractor in London at the moment is 13s. a cwt. Provincial prices are lower.

HORSES FOR THE TERRITORIAL ARMY.

A problem with which commands are at present much concerned is the provision of horses for the training of territorial units. The Remount Department is in no way responsible for this service, but it seems probable that something will have to be done to centralise the authority under which these animals are obtained; and from the fact that we have an organisation for registering and classifying horses all over the United Kingdom it may be decided that the Remount Directorate should be that central authority. At present the supply of horses for territorial camps is run entirely by County Territorial Army Associations.

PREPARATION IN PEACE FOR THE PROVISION OF ANIMALS TO COMPLETE THE ARMY TO WAR ESTABLISHMENT ON MOBILISATION.

We now come to an important task of the Directorate, viz., the preparations necessary to ensure the provision of animals on mobilisation. Arrangements must be completed in every detail so that on mobilisation there is no delay caused by the necessity for asking questions and having to wait for decisions. The work of obtaining horses and of issuing them to units must start and proceed automatically.

Mobilisation is the passing from peace to war establishment, and the difference between these establishments has to be made good. One or two comparisons show how great this difference is at present. A cavalry regiment in peace has 398 animals, in war 832; a difference of 434. An infantry battalion in peace has 19 animals and in war 97; a difference of 78. A brigade of field artillery in peace has 235, in war 603; a difference of 368.

The extra animals required have to be procured from civilian sources. To enter into detail, let us

first of all consider the cavalry horse and compare our present situation with that of 1914. In 1914 money was fairly plentiful. Each regiment was maintained on a high peace establishment, which included a number of trained riding horses boarded out with selected allottees. On mobilisation these boarded-out horses were available, and it was only necessary to add untrained horses to the extent of about 10 per cent. of the war establishment. After the Great War we continued the boarding out of trained horses, but such horses formed a general reserve for the cavalry as a whole, and have never been a part of the establishment of individual regiments. This scheme was introduced in 1919. The few horses now remaining are getting too old to be useful for military purposes, and are not being replaced.

As I have already pointed out, the peace establishment of each regiment is considerably lower than in 1914. On the other hand, the war establishment is higher, and in future it will be necessary for at least 50 per cent. of the riding horses to be impressed, a situation which does not appear on the face of it satisfactory, but is unavoidable in the present financial stringency in this country.

Within a few days of mobilisation it will, therefore, be necessary to procure between 5,000 and 6,000 riding horses for the cavalry division, and it is not going to be an easy matter to get the right sort of horse. No doubt a large number of hunters will be among those impressed, but the thing to remember is that a cavalry horse in war is asked to carry over 20 stone, and a really suitable animal to do this is not easily obtainable.

MULES.

The supply of mules for pack batteries will always be a difficulty, and unless we can replace them by home-bred ponies, reserves for these units must come from abroad. We are now trying Dale, Fell and Welsh ponies, but their suitability has not yet been proved.

DRAUGHT.

As regards draught horses, in pre-war days large numbers were registered and subsidised to provide a reserve for the artillery, and to ensure that animals would be immediately available for units of the first contingent. This scheme was not re-introduced after the Great War, but the £7 10s. boarding-out scheme was instituted instead. This supplied a far more reliable and efficient reserve, but owing to financial stringency it has now been abandoned, so we have practically no reserve of either trained cavalry or draught horses.

In considering, therefore, the provision of horses, we can assume that the full number required will have to be made up from the civil horse population, and these will be obtained by impressment. Section 115 of the Army Act gives power in certain circumstances for officers of field rank to impress horses.

A most important thing to realise is the difference in the conditions applying to horses purchased in peace and those purchased for war. The former we buy in the open market, sometimes at auction sales, competing against other purchasers, but when a state of emergency exists and has been declared by proclamation, we seize the market and—a new and important point—forbid the sale or purchase of any horse privately for a definite period.

Horses are then impressed by the government buyers. These buyers are earmarked in peace time, and the general procedure is that the purchaser fixes the price. Should the owner think it too low, he can protest, but he must nevertheless at once surrender the animal.

I would like to draw your attention to the fact that the law of impressment is as old as 1692, and is not merely a War Office imposition. The powers given by the Army Act are very great, and the sections dealing with the impressment and classification of animals are worth reading. The impressment of a large number of suitable animals is a difficult administrative problem, and success depends upon two separate factors. First, the existence of the animals, and secondly, the time in which they can be made available. We must keep these two points distinct in our minds in making our preparations.

The steps taken to ensure that the animals exist divide themselves into three stages:—

(1) The taking periodically of a census of all horses in Great Britain.
(2) The classification of the animals to determine which are fit for military purposes.
(3) The annual allotment for impressment of the classified horses.

CENSUS.

The taking of the census is not a remount service, but is carried out at intervals of four years by the police under the direction of the Home Office. It merely shows the actual horse population and does not differentiate between the fit and the unfit; nor does it tell us which horses could easily be spared and which must be left with their present owners in an emergency. The last census was taken in June, 1924, and showed the horse population of Great Britain to be just under two million. It is not known how many of these are actually fit for military purposes, but probably not more than a quarter of a million at most.

REMOUNT DISTRICTS.

The Commander-in-Chief in each command is responsible for the mobilisation arrangements in his command. He has at his headquarters a D.A.D. Remounts, the command itself being divided into various remount districts, the size of which depends on local conditions, but it is important that the boundaries should coincide with some civilian organisation. Thus a remount district may consist of so many police petty-sessional districts in a county, or of a county itself, or of even two or three counties.

Each remount district is controlled by a district remount officer (D.R.O.), who is responsible for all remount questions in that district. During the two years immediately succeeding the census the D.R.O. inspects as many horses in his district as possible and classifies them not only according to their fitness

for military duty, but also with regard to their suitability for the various arms of the service. As a result of this classification the War Office determines how many of the actual number of animals required on mobilisation will be found by each command. This information is published in a somewhat bulky document called the "Remount Statement," which gives the detailed number of animals, by classes, required by each unit on mobilisation.

On receipt of the remount statement the command allots quotas to the various remount districts. The D.R.O. is then in a position to complete the third task, viz., the annual allotment for impressment. He knows the actual numbers required from his district, and so settles which of the horses classified by him shall be the ones earmarked for impressment in the case of an emergency.

The D.R.O. has to be careful that sufficient horses are allotted to ensure that the full number required will be available when the time comes. The classification in subsequent years may be limited to this number.

We now come to the time element. We must imagine that we know that sufficient animals exist. To ensure that they are available within the specified time according to the mobilisation scheme is a question or organisation, details of which must be worked out in commands, but it is important to remember that horses require men to look after them, and must not be delivered to units till the latter are sufficiently strong in personnel to receive them. Commands are responsible for this.

Let us review what steps the various officials have to take to ensure that the animals will be forthcoming within the scheduled time. The D.R.O. knows how many horses have to be obtained in his district. He, therefore, has to make arrangements for :—

(1) The division of his district into purchasing areas according to the number of horses to be bought on any one day.
(2) The appointment of a purchaser to take charge of each area, and of the various officials (veterinary surgeon, etc.) to assist the purchaser.
(3) The formation of collecting centres in each area where horses can be collected, branded, and selected for issue to the various units.
(4) The appointment of a distributor to take charge of collecting centres.

This information is supplied to command headquarters, who then have to arrange for :—

(1) The transport of horses from collecting centres to units. This involves the drawing up of a complicated railway time-table not only for the horses from collecting centres to units, but also for the conducting parties which it may be necesssary to send from units to collecting centres to fetch the horses. This time-table must agree with the schemes of the individual units.
(2) The payments by purchasers for the horses impressed by them. Special payment forms, similar to cheques, are kept ready for issue to purchasers. These are given to the owner, who receives money for them on presentation at a bank.
(3) A host of small details such as the publication in the press of the names of purchasers and the areas in which they are to operate, the display of posters prohibiting private sales, the supply to command paymasters of specimen signatures of purchasers.

All details of the above arrangements must be worked out and an accurate record kept ready for issue on mobilisation. This, of course, entails the filling in of numerous forms. We have done our best to keep the number of forms as few as possible, but the following are essential :—

(*a*) List of allotted horses.
(*b*) Purchaser's summary.
(*c*) Distributor's summary.
(*d*) Form giving detailed requirements of units.

All the above arrangements continually change owing to various factors such as alterations in establishments, moves of units, and changes in ownership of civilian horses.

It is, therefore, obvious that finality in the work of remount officers can never be reached, and that amendments to the above forms will have to be issued from time to time.

Arrangements more or less on the above lines were made prior to August, 1914, the result being that all animals required were forthcoming in the first ten days of mobilisation.

We will now see what actually happens when mobilisation is ordered. The purchaser, who has been nominated in peace time, at once sets to work according to programme. Owners will probably have sent their horses to purchasing posts, where they will be examined by the veterinary surgeon and the purchaser. When purchased they will be taken to a collecting centre, where the distributor will allot them to the unit for which they are most suited. This will all be done in accordance with the time-table, so that, say, by the third day 100 horses will be ready at some small collecting centre for despatch to specified units. If the arrangements made in peace are satisfactory, a train will also be at that collecting centre ready to convey the horses to their destination.

Remounts in a Theatre of War.

We still have one subject to consider, and that is the supply of remounts to the army in the theatre of war. The remount directorate is responsible for the supply of every sort of animal, including carrier pigeons and messenger dogs. The Director of Remounts at General Headquarters is responsible that all arrangements are made for meeting the requirements of units. He has under his control the following remount units :—

(1) A Base Remount Depôt, where the main reserve of animals is kept and where horses are trained, and those requiring it are rested or acclimatised.

(2) Advanced Remount Depôts situated at convenient places on the L. of C. These are kept up to strength with horses fit for immediate issue, and their duty is to feed the units with remounts.

(3) Field Remount Sections, which are small, independent units, and are used to convey animals to and from remount depôts.

Animal casualties on active service are at once struck off the strength of the unit, which demands replacements through the usual channels of division or corps. The latter forwards a consolidated return showing requirements for each arm of the service. Animals are issued in accordance with this demand, and when possible are taken to the divisional headquarters area by a field remount section, where they are distributed to units. This distribution will generally be supervised by a member of the "Q" staff of the division, and with a view to efficiency in the allotment, it is important that such officers should make themselves well acquainted with the various types of army horse, descriptions of which are contained in the new edition of the Remount Regulations. A pamphlet entitled "Types of Horses for Army Remounts," published by the War Office, gives some very useful information on this subject.

There is one point which I wish to emphasise, and which I mentioned in the early part of this lecture, namely, that no private horses are allowed in the theatre of operations. The Remount Department will buy at a fair valuation all chargers in possession of officers. The maximum prices given for the various classes will be found in para. 588 (*c*), Allowance Regulations. No compensation will be paid to the owner of a private charger taken overseas in the event of its being killed.

Light Horse Breeding.

I have already referred to the Light Horse Breeding Scheme. The responsibility for this scheme was transferred from the Ministry of Agriculture to the War Office as from 1st April, 1924, and the scheme as it existed under the Ministry is being carried on with but few modifications. A full description of the light horse breeding policy is beyond the scope of this lecture, but broadly it consists in the provision of certain premiums for selected thoroughbred and other stallions and the purchase for the army, when possible, of the produce of such stallions. By this means the small owner can be sure of the services of good sires at a cheap rate, and also of a market for his young stock if suitable to military requirements. The scope of the scheme is naturally limited by financial considerations, and the question of light horse breeding is a big and controversial one. All experiments in this connection must be slow in showing results, but the remount department has the benefit of expert civilian advice, and it is contended that the annual grant in aid of this important service is being spent to the best advantage.

The Control of Liver Fluke in Sheep.*

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History of Experiments in North Wales to 1925.—In 1920-21, North Wales suffered from a severe epidemic of Liver Rot, during the progress of which the senior writer commenced duties as Adviser in Agricultural Zoology. *Limnæa truncatula,* the recognised host snail, was found to be present in the affected districts in enormous numbers, and means were considered for its control. Among other things copper sulphate, which had been found effective for the destruction of snails by workers in the U.S.A., was tried at the suggestion of Captain Daubney, then a member of the laboratory staff of the Ministry of Agriculture. Experience in Mid-Wales had led to the opinion that lime and salt, previously advocated as useful for this purpose, were of doubtful value. Field experiments carried out in June, and again in October and November, 1921, in various centres in North Wales, indicated that 1 per cent. solutions of copper sulphate were effective, and that a dust of one part copper sulphate and two parts of powdered kaolin (china clay) was also successful (1), (2), and (3). The Ministry advocated the use of copper sulphate in Leaflet 89, re-written in August, 1921. The summer of 1921 was exceptionally hot and dry, and effected so complete a natural control of the snails that it became very difficult to obtain places for further experimentation. Subsequently the summer of 1922 was unusually wet and sunless, and this resulted in an increase of snails, and during the winter 1922-23 a few minor complaints were again received from some of the wettest farms. Experiments conducted in Anglesey during December, 1922, and March, 1923, in order to test sulphate of ammonia against sulphate of copper under field conditions (5) resulted in the failure of sulphate of ammonia and a further marked success of copper sulphate.

Wet, dull weather prevailed throughout 1923 and 1924, resulting in a great increase and spread of all species of Limnæa, and a recurrence of Liver Rot in epidemic form in many places. The Advisory Leaflet (3) was re-written and revised, giving further details, but during the winter of 1924-25 it became evident that the methods could be further simplified, cheapened, and extended, and to this end numerous field experiments were carried out. These are now described, together with other details that have accumulated during practice.

It may be noted here that observations by Dr. Monica Taylor (6) and one of the writers (7) have indicated that *L. peregra* may also act as a host for *Distomum hepaticum*, the Liver Fluke. Three species of Limnæa are common in North Wales: *L. truncatula*, the most abundant, widespread and dangerous; *L. peregra*, a larger form, which is seldom found

* Reprinted from the *Journal of the Ministry of Agriculture and Fisheries*, November, 1925.

apart from soft mud in ditches, etc.; and *L. palustris*, a much more local species, not so far implicated as a host for the Fluke.

FIELD EXPERIMENTS IN 1925.—In all the field trials, plots were selected as far as possible to illustrate all types of land, and *L. truncatula* was abundant on all. The most heavily infested plots were measured out, demarcated by means of numbered pegs, and made as equal as circumstances allowed. Series were treated as simultaneously as possible, and the subsequent collection of snails also. All snails were then removed direct to the laboratory and placed under water in dishes for 24 hours, after which a first count was made. One or two further check counts were subsequently made in all cases. In many instances collection after treatment is by no means easy, especially if the results have been successful. Dead snails sink rapidly in soft mud; heavy rain may raise the water level and cause muddiness, and long grass and herbage obscure small dead snails, especially when these are situated in cracks, crevices and holes. Such difficulties have several times resulted in disappointing counts and subsequent repetition of experiments.

Spraying was done by means of a Holder-Harridan Automatic Knapsack (except Plots 15 and 16, which were treated by means of a syringe). In dusting a small hand bellows was used. Proportions indicated in the following field experiments are by weight.

SERIES A.—Hendre, Boeth, Llangoed, Anglesey, 29th-31st April, 1925. Weather fine and bright; showers soon after treatment, otherwise fine.

Plot 1.—Area: 25 sq. yd. grass land. Ground dry and snails on surface, which was fairly smooth, and herbage short.
Application: Spray, alum 10 per cent.
Result: 104 *L. truncatula* collected; 1 dead, rest alive.

Plot 2.—Area: Contiguous to 1, and land similar.
Application: Spray, alum 5 per cent.
Result: 138 *L. truncatula* collected, all alive.

Plot 3.—Area: As in 1 and 2. Land similar.
Application: Spray, alum 2½ per cent.
Result: 100 snails collected, all alive.

Plot 4.—Area: 25 sq. yd. Land similar to 1, 2, and 3.
Application: Plot untreated.
Result: 116 snails recovered, all alive.

Plot 5.—Area: 22 sq. yd. Ditch, drying, but mud soft and wet, and with shallow holes full of water here and there.
Application: Dust, copper sulphate 1 part; kaolin (china clay) 2 parts.
Result: 114 snails collected, all dead.

Plot 6.—Area: 44 sq. yd. Same ditch (22 sq. yd. on either side of Plot 5).
Application: Plot untreated.
Result: 115 snails collected; 12 dead, 103 alive.*

Plot 7.—Area: 25 sq. yd. Soft damp mud, part of a drying pool in a grass field. Grass tufts here and there. Many snails in hollows.
Application: Spray, copper sulphate 1 per cent.
Result: 131 snails collected, all dead.

Plot 8.—Area: 25 sq. yd. Adjoining and similar to 7.
Application: Spray, copper sulphate 2 per cent.
Result: 182 snails collected, all dead.

Plot 9.—Area: 25 sq. yd. Adjoining and similar to 8.
Application: Plot untreated.
Result: 60 snails collected; 2 dead, 58 alive.

Plot 10.—Area: 25 sq. yd. Shallow grassy ditch, partly dried out, partly shallow water.
Application: Broadcast, copper sulphate 1 part; coarse sand, 2 parts.
Result: 52 snails collected, all dead.

Plot 11.—Area: 25 sq. yd. Damp grass land; vegetation short.
Application: Plot untreated.
Result: 82 snails collected; 5 dead, 77 alive.

SERIES B.—Bryn Gôf, Llanfair P.G., Anglesey. April 29th-May 1st. Weather fine at application, followed by rain.

Plot 12.—Area: 72 sq. yd. Wet pasture land with coarse grass and rushes.
Application: Broadcast, copper sulphate, 1 part; sand, 2 parts.
Result: 17 snails collected; 15 dead, 2 alive.

Plot 13.—Area: 72 sq. yd. Plot adjoining 12 and land similar.
Application: Broadcast, copper sulphate only (2 lb. 6 oz. used).
Result: 16 snails collected; 14 dead, 2 alive.

Plot 14.—Area: 72 sq. yd. Adjoining 12 and 13 and land similar.
Application: Plot untreated.
Result: 55 snails collected; 4 dead, 51 alive.

SERIES C.—Tre Wyn, Llanerchymedd, Anglesey. May 7th-9th, 1925. All plots at this centre were on the same field, a six-year ley (pasture) on heavy soil, waterlogged in parts. Vegetation short from recent grazing. Land damp when treated and heavy showers followed immediately. Further heavy rain prior to and during collection. A strong wind was adverse to dusting. At collection, land sodden and water in pools turbid, whilst observation was rendered more difficult by large numbers of dead earth-worms which blocked the hollows in which most of the snails were found. This result was unusual, and probably due to the heavy rainfall. Dead worms are frequently present in small numbers, but not in any way comparable to this experience.

Plot 15.—Area: 44 sq. yd.
Application: Spray, copper sulphate ½ per cent.
Result: 27 snails collected; 25 dead, 2 moribund (died soon after).

Plot 16.—Area: 22 sq. yd.
Application: Plot untreated.
Result: 31 snails collected, all alive.

Plot 17.—Area: 66 sq. yd.
Application: Dust, copper sulphate, 1 part kaolin, 4 parts.
Result: 30 snails collected; 27 dead, 3 alive.

Plot 18.—Area: 22 sq. yd.
Application: Broadcast, salt at 10 cwt. per acre.
Result: 15 snails collected; 7 dead, 8 alive.

* The dead snails in this (and other) control plots represent natural death rates—in this instance due to the drying out of a few patches of mud.

Plot 19.—Area : 22 sq. yd.
Application : Broadcast, copper sulphate only (8 oz. used).
Result : 40 snails collected ; all dead.

Plot 20.—Area : 22 sq. yd.
Application : Broadcast, copper sulphate, 1 part ; sand, 3 parts.
Result : 8 snails collected, all dead.

Plot 21.—Area : 22 sq. yds.
Application : Broadcast, copper sulphate, 1 part ; sand, 2 parts.
Result : 32 snails collected, all dead.

Plot 22.—Area : 22 sq. yd.
Application : Plot untreated.
Result : 30 snails, all living.

SERIES D.—Bryn-Gwyn Hall, Llanfair P.G., Anglesey. May 21st-23rd, 1925. Rich, wet meadow land, with strong growth of grass, 4-8 in. high. Experiment put down in dry weather. A sharp shower fell three hours prior to snail collection. Dusts were not fully washed down from the long grasses. Hollows beneath vegetation full of water.

Plot 23.—Area : 22 sq. yd.
Application : Dust, copper sulphate, 1 part ; kaolin, 4 parts.
Result : 20 snails collected, all dead.

Plot 24.—Area : 22 sq. yd.
Application : Duplicate of 23.
Result : 23 snails collected, all dead.

Plot 25.—Area : 22 sq. yd.
Application : Broadcast, sulphate of iron at 10 cwt. per acre.
Result : 17 snails collected ; 4 dead, 13 alive.†

Plot 26. Area : 22 sq. yd.
Application : Broadcast, copper sulphate, 1 part ; sand, 4 parts.

Plot 27. Area and application : Duplicate of 26.
Result : 71 snails collected, all dead. Plots combined during collection.

Plot 28.—Area : 22 sq. yd.
Application : Plot untreated.
Result : 37 snails collected ; 8 dead, 29 alive.

Plot 29.—Area : 54 sq. yd.
Application : Spray, copper sulphate ½ per cent.
Result : 80 snails collected, all dead.

Plot 30.—Area : 22 sq. yd. Wet mud on margin of stream.
Application : Sulphate of ammonia (dry neutral) at 5 cwt. per acre.
Result : 64 snails collected, all dead.

SERIES E.—Plas Llanfaglan, near Carnarvon. May 29th to June 4th, 1925. Rather rough, level, water-logged grass land, much "poached" by cattle, and with strong coarse vegetation. In every way difficult to treat and examine. Experiments put down in very strong wind after heavy rain, and land partially flooded. Collection had to be delayed to allow surface water to subside.

Plot 31.—Area : 110 sq. yd.
Application : Broadcast, copper sulphate, 1 part ; sand, 8 parts.
Result : 40 snails collected, all dead.

Plot 32.—Area : 110 sq. yd.
Application : Broadcast, copper sulphate, 1 part ; sand, 4 parts.
Result : 48 snails collected, all dead.

Plot 33.—Area : 110 sq. yds.
Application : Broadcast, duplicate of 32.
Result : 64 snails collected, all dead.

Plot 34.—Area : 44 sq. yd.
Application : Broadcast, copper sulphate, 1 part ; sand, 8 parts.
Result : 58 snails collected, all dead.

Plot 35.—Area : 22 sq. yd.
Application : Dust, chloride of lime.
Result : 57 snails collected ; 32 dead, 25 alive.‡

Plot 36.—Area : 44 sq. yd.
Application : Plot untreated.
Result : 21 snails collected ; 5 dead, 16 alive.

CONCLUSIONS.—From the foregoing it will be seen that copper sulphate proved successful when (1) sprayed, (2) dusted, (3) broadcast.

1. *Spray.*—Solutions of 2, 1 and ½ per cent. were all equally effective under varied field conditions. The method is especially suitable for damp land. Where the land is waterlogged or there is much standing water present, there is a possibility of a ½ per cent. solution becoming too dilute to be effective (although such a case has not yet been experienced), and it would, under such conditions, probably be advisable to use 1 per cent., or even, in extreme cases, 2 per cent. solutions, as a precaution. On the other hand, snails may remain alive on land that has become partially dried, and it is then essential that the surface shall be thoroughly wetted. The amount of fluid required to do this will obviously vary with conditions. On plot 29, where the land was damp below heavy herbage, the amount used works out at 137 gallons per acre ; with shorter herbage less would be needed, and on damp mud still less.

A difficulty arises in the use of this method in some country districts owing to the absence of large spraying outfits and further, that the majority of labourers are quite unused to even knapsack machines. An advantage of sprays is rapid toxic action, whilst risk to stock is slight. Alum sprays were not satisfactory.

2. *Dust.*—Copper sulphate, one part by weight, kaolin (china clay), four parts by weight, has proved successful. Kaolin is used as a "carrier," and also marks out the area treated. Flour can be used as a substitute, but is much more expensive. The method is excellent for small areas, narrow ditches, margins of ponds, and so forth, and is easy to mix and apply, but requires suitable dusting or dry spraying apparatus which is generally unknown on farms and more usually employed by gardeners, and fruit and market growers. Dusts are perfectly useful where clean water is difficult of access. The toxic action is generally slower, depending to a considerable extent on rain (especially if there is much vegetation) and stock should be excluded from treated areas until sufficient rain has fallen to wash the grass clean. Plot 23 works

† The living snails were kept under observation in the laboratory, and after a further 24 hours, several others died. Eventually only one remained alive.

‡ The living snails continued under observation, and ultimately 7 remained alive.

out at 27½ lb. copper sulphate and 110 lb. kaolin, roughly 1¼ cwt. per acre.

3. *Broadcast.*—One part copper sulphate to four, and one to eight of fine, dry sand (Plots 31, 32, 33 and 34 in particular), proved suitable for treating large areas of swampy land, etc., which are often too soft for spray or dusting machines to be used. Perfectly simple to mix, and applicable by any labourer. The distribution must be as even as possible, and the sand quite dry. No modern manure drill was available for use in these experiments, and the older types tend to distribute the dressing in rows. This method also depends on moisture for quick action, and is best employed on wet land, or before rain. The remarks regarding stock apply as in the case of dusting. Plots 31 and 34 work out at 27½ lb. copper sulphate and 220 lb. sand, roughly, 2¼ cwt. per acre, and plot 32 at 27½ lb. copper sulphate and 110 lb. sand, or 137½ lb. per acre. Several plots treated by farmers with dry copper sulphate alone were examined, and found successful. A small quantity of kaolin mixed with the sand would be useful to outline treated areas. Sulphate of iron and salt were not satisfactory, bearing out previous trials. Sulphate of ammonia succeeded, but at prohibitive cost. Previous experiments using up to 2.6 cwt. per acre failed (5).

Costs.—Copper sulphate of 98—99 per cent. purity can usually be purchased retail at about 4d. or 4½d. per lb. Wholesale prices at present vary from 3d. to 4½d. per lb. according to the bulk ordered, the latter for 100 lb. bags carriage paid (taken from a quotation of a well-known firm).

Spraying with ½ per cent. solutions of copper sulphate (as in Plot 29) would cost (without labour) approximately 7s. 6d. per acre.

In dusting (as in Plot 23) the cost per acre would be nearly 10s. for copper sulphate, and about 2s. 3d. to 2s. 6d. for china clay (at ¼d. to ½d. per lb.). The additional cost of labour in each case will depend very largely on the time taken to apply, which again is governed by the size of the machine employed and the type of land treated.

Broadcasting (as judged by Plots 31, 32, and 34) will cost about 10s. per acre for copper sulphate, plus labour and cost of sand. The latter is usually readily obtainable, and application rapid and relatively cheap.

SUMMARY.—1. A series of 36 field plots were laid down in April, May and June, 1925, further to test copper sulphate and several other substances applied as field dressings to control *L. truncatula*.

2. Copper sulphate continued to give good results, and was successful as a spray, as a dust, and broadcast, mixed with sand.

3. Sprays of ½ per cent. strength were successful, but under certain circumstances stronger solutions are suggested.

A dust of one part copper sulphate and four parts kaolin (china clay) proved efficient.

Broadcast mixtures of one part copper sulphate and four parts sand (and one in eight also) were found effective, easy of application and relatively reasonable in cost.

Sincere thanks are due to the occupiers of the land on which experiments were carried out, for much assistance in every way.

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Foot-and-Mouth Disease: Blackpool Practitioner's Action for Libel.

At Manchester Assizes, on November 24th, before Mr. Justice MacKinnon and a special jury, a claim for damages for alleged libel was heard in which Mr. Tom Walker, M.R.C.V.S., 303 Whitegate Drive, Blackpool, was the plaintiff, and Messrs. Geo. Toulmin and Sons, Ltd., Preston, were the defendants.

Mr. Wingate Saul, K.C., and Mr. McCleary (instructed by Messrs. Callis and Woosnam), appeared for the plaintiff, and Mr. Singleton, K.C., and Mr. Lustgarten (instructed by Messrs. R. and W. Ascroft) for the defendants.

In his opening, Mr. Wingate Saul said that on March 11th, 1925, the defendants, who were proprietors of *The Lancashire Daily Post*, published an article relating to the outbreak of foot-and-mouth disease in 1923, which purported to be a summary of the report of a Government Departmental Committee concerning the outbreak.

The article complained of, after referring to revelations made in the report of the Departmental Committee, stated that one of the revelations was that "the Blackpool veterinary surgeon who was called in to examine the first two infected cows, was the unwitting agent whereby the infection was introduced into the landing stage at Fleetwood."

Counesl said plaintiff was the only veterinary surgeon practising in Blackpool. He had practised there for over 20 years in partnership with a Mr. Hutchinson, who practised at Poulton-le-Fylde, where he had a surgery and place of business.

The words used in the report were "local veterinary surgeon," and if these words had been used in the article they might have referred to any one of 11 or 12 people practising in that district.

The article complained of was, he submitted, not a fair and accurate summary of the Government report, and therefore, privileged: nor was it the fact that a correction published in the same paper on March 12th was inserted by agreement with the plaintiff, or that he had said he would be satisfied if a correction was published. The libel was a very serious one, and one calculated to seriously damage plaintiff in his business, and plaintiff asked the jury for substantial damages.

Plaintiff, in evidence, said he served his articles with Mr. Geo. Hutchinson, and became his partner in 1903. Witness practised in Blackpool and Mr. Hutchinson in

Poulton. He denied that in a telephonic communication with a *Lancashire Daily Post* representative, on the evening of March 11th, he had asked for a correction to be published.

In cross-examination, he admitted that Mr. Hutchinson's name as the senior partner appeared first on the name-plate at the Blackpool surgery, and that Mr. Hutchinson's name was in the Blackpool Corporation year book as veterinary inspector.

Mrs. Walker also gave evidence denying that any agreement had been come to with defendants' representative to publish a paragraph to state that her husband was not the person referred to in the article. She had rung up another local paper, and asked them to add a note to that effect.

A number of farmers and others in the district were called to state that they formed an opinion from the article published by defendants that Mr. Walker was the person referred to.

Mr. Singleton, in cross-examination, asked several of the witnesses for the plaintiff whether it was not common knowledge in the district that the first outbreak of disease occurred at the farm which was referred to in the official report, and whether the witnesses did not know that not Mr. Walker but another veterinary surgeon attended the area in which that farm was situated. He put it to witnesses who came from Fleetwood that the article showed that the disease was said to have been carried by a veterinary surgeon who went from that farm to the Fleetwood landing place, and it was admitted by witnesses that they knew that a veterinary surgeon other than Mr. Walker attended at Fleetwood.

At the conclusion of the case for the plaintiff Mr. Singleton submitted that the publication was privileged, as the publication, bona-fide and without malice, of an extract or abstract from a Departmental Committee's report. There was no material difference, he said, between the article and the report on which it was based. The Judge, however, ruled that the question whether this was a fair abstract from the report was one of fact which must go to the jury.

Mr. Singleton argued that there was no libel on the plaintiff in the article complained of. There were other veterinary surgeons who practised or did veterinary surgeons' work in Blackpool, and the article referred to the veterinary surgeon who was called in to examine the first two infected cows. That was not Mr. Walker, so how could he say that it referred to him? The whole neighbourhood knew who was looking after the cases on the farm in question; how could witnesses say that they thought the article referred to Mr. Walker, who attended that farm? He submitted that the article was a fair and accurate abstract of the official report.

Mr. G. H. Grundy, sub-editor, said the article complained of was reprinted without any alteration from a morning paper as being of local interest.

Mr. Wingate Saul: You took the risk of the morning's paper's report being correct?—Yes.

The Judge: Yes; just as much as if he took a cricket result as being correct.

The Judge directed the jury that an official report of the kind which had been dealt with might be published with impunity, provided it was without malice and a fair and accurate reproduction. If the jury held that this newspaper article was a fair and accurate summary of the Parliamentary report they would give a verdict for the defendants. If they thought that the article was unfair because it spoke of a "Blackpool" veterinary surgeon, instead of a "local" one, they must ask themselves the further question, did the newspaper article libel the plaintiff. To amount to that the phrase "a Blackpool veterinary surgeon" must be not merely an unfair reproduction of the phrase in the report, but it must mean Walker, and not someone else, as it would be read in Blackpool by people knowing the local situation.

After an absence of less than 10 minutes the jury returned a verdict for the defendants, and judgment was given accordingly, with costs.—*Lancashire Daily Post.*

The Veterinary Record.

5th December, 1925.

THE ARMY REMOUNT SERVICE.

In this week's issue we publish in full a lecture delivered at the London School of Economics by an officer of the Remount Directorate of the War Office on "The Organisation of the Remount Service, and its duties in Peace and War." We would like, in the first place, to endorse heartily the action of the War Office in thus taking the public into its confidence in the work that lies in the province of the Remount Directorate and, in the second place, to congratulate the officer on the clarity of his lecture at this important school of instruction. In these progressive days, when men's minds are so much turned to mechanical devices for the performance of work and for pleasure, the old horse power suffers in proportion. Even in the Army, the inclination is to think in terms of motor traction and mechanicalization, rather than in terms of horse transport on which War Establishments have hitherto been based. Lest we forget and permit the new order of things to supplant the old to the verge of decadence of one of our oldest and most valued agricultural industries, waking up one day to embarrassing realities, the lecture serves more than a useful purpose. Publication of remount organisation and system is helpful to owners and breeders, and a little judicious advertising of the horse will do no harm. We look to the time when the horse, in his various utility rôles, will regain his public favour. We therefore trust the Remount Service will carry on its useful work and, if we may be permitted to offer the suggestion, we would advise the fostering of a strong alliance with all breed societies, and the adoption of a regular propaganda of simple public instruction and enlightenment by lectures and by films, of maintaining the horse standard of our country, both as to adequate and desirable number and quality. The Army being a valuable customer to agriculture, has a great responsibility in this respect, and it is quite right that such responsibility should not only be accepted, but acted up to in the efficient manner which is characteristic of the Army. That there are difficulties in the situation goes without saying. The subject of the horse, his breeding, his selection for various purposes of trade and pleasure, his management and even the treatment of his ailments, has

always been, and probably ever will be, interwoven with controversy; but what matter as long as the product is good, and he continues to maintain a place in the sun? Perhaps there is no section of the community in a better position than the Veterinary Profession to appreciate the difficulties of a Remount Service, both in peace and war. Close association makes it so. The dovetailing of arrangements regarding the fits and the unfits of an army, for instance, begets a sympathetic feeling between the two services concerned, and more or less common interests establish an alliance which works for the common good. The fine work achieved by the Remount Service during the late war is well known to us all. It may not have been recognised to the extent that was deserved, but with the experience gained, its organisation and its remounting system stands as a pattern for all time and to all countries.

In reading through the lecture, one cannot but be struck at the encouragement which the Army and its remount service offer to officers to possess and to make use of horses to the fullest extent, whether in the hunting field or on the polo ground. The interest which this creates has far-reaching good. What one person does, another, by example emulates. A difficulty which Cavalry was faced with during the war was the provision of young men who had any ideas of riding and, therefore, the open door to pleasure which concessions in possessorship of horses afford to the individual, is a wise policy, and we have it on the assurance of the lecturer that financially there is no loss to the State in the measure.

We are glad to note that there is a likelihood of authority being centred in the War Office for the provision of horses for Territorial Force training. Our sympathies lie very much with Territorial Force endeavour and, unquestionably, it should receive every support and consideration possible. With the machinery now possessed by the Remount Service for registering and classifying horses throughout the United Kingdom, it would appear quite in keeping with general army efficiency if responsibility for the supply of horses was accepted by the Remount Directorate in conjunction with Territorial Force Associations.

Reference is made to the light horse-breeding scheme which was transferred from the Ministry of Agriculture to the Remount Service last year. One does not know whether the shelving of responsibility—if it may be so termed—from the State to an army is altogether wise. However, the War Office and its Remount Department has the advantage of expert civilian advice, and the transfer may await judgment by results.

CLINICAL AND CASE REPORTS.

Carcinomata of the Testicle and Spleen in a Bitch.

By E. P. Barrett, M.R.C.V.S.,
Margate.

Two months or so ago, there appeared in the *Veterinary Journal*, a request that specimens of tumours of the dog's testicle should be sent to Mr. Cairns, M.R.C.S., London Hospital, for examination.

At about that time, I was asked to destroy a mongrel dog, about 11 years of age, whose right testicle had attained the size of a tennis ball; the left one being normal. During the last few weeks only, his appetite had failed, and he had become very emaciated. On *post-mortem* examination I found what appeared to be metastatic tumours in the spleen. I sent the affected testicle and the spleen to Mr. Cairns for examination, and I have just received his report. It occurs to me that this might be of interest to readers of the *Veterinary Record*.

The report is as follows:

Microscopical Diagnosis.

(1) to (5) Solid acinar, spheroidal-celled carcinoma of testicle of a dog.

(6-7) Secondary, solid acinar, spheroidal-celled carcinoma in spleen.

Commenting on the report, Dr. Cairns says: "The tumour was a typical spheroidal-celled carcinoma, and the nodules in the spleen were metastases. The prostate, so far as I could determine, had no metastatic nodules.

"Carcinoma seems to be the predominant tumour of the testicle in dogs. I have now collected about six or seven such cases.

"I am very much obliged to you for having sent the specimen to me, and if you meet with any more such cases I would be very grateful if you would let me have them."

Rapid Formation of Vesicle Calculi.

By F. Chambers, O.B.E., F.R.C.V.S.,
Wolverhampton.

In the *Veterinary Record* of June 27th (p. 536) I reported a case of the removal of calculi from the bladder of a Pekingese bitch. She made a very good recovery, and in spite of the fact that she was pregnant at the time of the operation, she afterwards produced five puppies without much trouble. On November 2nd, I was asked to examine her again as she was micturating frequently, and the urine was at times observed to be blood-stained. On palpation of the bladder through the abdominal wall, I felt sure that I could feel a calculus but, to make certain, I had a skiagram made. The photograph showed that there were two calculi present as large as marbles. On November 4th, I operated on her again, making my incision through the scar of the original wound. There were no omental adhesions, nor could I see where the bladder had been incised in the first place.

The two calculi were removed and the bitch made an excellent recovery. It would appear almost incredible that two such large calculi could be formed within the time, *i.e.*, from May 5th, 1925, until November 2nd of the same year. Since the operation she has been given gr. v. acid sodium phosphate twice daily, with a view to preventing further concretions forming.

ABSTRACTS AND REVIEWS.

Ceylon Veterinary Administration Reports for 1924.

The Report of the Government Veterinary Surgeon divided into eight sections.

Section I. deals with the staff, which, so far as the purely veterinary is concerned, comprises two Government Veterinary Surgeons (M.R.C.V.S.), and eight graduates of the Bombay Veterinary College (G.B.V.C.). There are also managers respectively for the Government Dairy Farm at Colombo, and the Government Farm at Ambepussa, and eleven stock inspectors.

Section II. deals with Infective Diseases, of which rinderpest, foot-and-mouth disease and ostitis fibrosa (commonly known as osteoporosis) are the chief. Rinderpest prevailed considerably during the early part of the year, and where stoppage of movement of cattle, immediate destruction of those affected, and inoculation of in-contacts was practised, limitation of outbreaks was successfully effected. But it was found impracticable to close the larger main roads, destruction was unpopular, and inoculation was not generally employed on account of the refusal of many owners to pay the cost of the serum. Non-notification of the disease and removal of in-contacts were common. An instance of incubation being as long as fifteen days is recorded.

Foot-and-mouth disease occurred from time to time throughout the island. It is of so mild a type that frequently it is not reported. A reputed preventative sent from the British Empire Exhibition for trial failed to prevent.

Osteoporosis continues to be the most serious source of loss to horse owners, and a considerable portion of the report is devoted to it. Comment is made on the ill-proportioned mineral content of the foods in Ceylon as part cause, the proportion of calcium to phosphoric acid being very low. Intestinal toxæmia, through infestion with worms and consequent disturbance of the function of endocrine glands, is looked on as a contributory cause. Deficiency of iodine in food stuffs, insanitary stables, lack of vitamin "A" are also mentioned, and their correction has proved of value in prevention. An infection theory has not been generally accepted in Ceylon.

Other infective diseases, such as piroplasmosis, coccidiosis, anthrax, hæmorrhagic septicæmia, black quarter and rabies are mentioned, but do not occasion much loss. It is interesting to note that no tuberculosis in cattle occurred during the year, but a turkey sent for *post-mortem* examination was extensively diseased.

Chapter III. deals with miscellaneous diseases. Infectious ophthalmia in cattle, chiefly amongst young animals, is extremely common, and requires investigation. Three-day fever, with alarming symptoms, and attended by extreme stiffness, occurs commonly in the colder months. Manuring the ground with nitrolium under certain circumstances occasions a number of deaths from evolution of hydrocyanic acid, goats appearing to be more susceptible than cattle. Parasitic gastritis in cattle, particularly amongst calves, is the cause of very serious loss: specimens of the worm have been identified by Sheather and Ware as *Mecistocirrus digitatus*. At the Government Dairy there were more deaths from this cause than from all other diseases. Assistant veterinary surgeons and stock inspectors have devoted much time and trouble towards improvement of cattle breeding, but a drawback in Ceylon is the lack of pasture.

Chapter IV. deals with the working of the Government Dairy Farm, Colombo, and the small farm at Ambepussa for the rearing of heifers. The former supplies milk to the various hospitals in Colombo. It is interesting to note that Dr. Shaw's prophylactic for foot-and-mouth disease was tried at the latter farm in five head of cattle and four out of that number contracted the disease within ten days after the injections were given.

The remaining chapters relate to statistics of the number of buffaloes and cattle in different Provinces, the incidence of disease under various headings, slaughter returns, importation and quarantine records. The total number of cattle and buffaloes in the whole island is given at 1,429,507, of which 470,524 are buffaloes and 958,988 black cattle.

J. M.

The Dangerous Effects of Oil of Chenopodium on the Human Subject.

Dr. Carl Braun,* State Physician (Gerichtsarzt), Munich, reviews many fatal cases of poisoning with oil of chenopodium reported in German literature and describes the symptoms of one case which came under his notice. A child was given three drops of the drug at night and again six drops next morning. Two hours after the second dose the patient became ill and died within fifteen hours, medical aid being unable to arrest the course of the poisoning. Microscopic examination of the organs and an assay of the contents of the stomach failed to reveal any cause of death other than chenopodium poisoning. In the author's opinion, even the official restrictions on the sale of oil of chenopodium in Germany are not sufficient protection; he stresses the danger of the cumulative toxic action and suggests that the Pharmacopœia should emphasise this point, so that practitioners not well acquainted with current literature may be officially warned. The cumulative action of the drug is so pronounced as to make no practical difference between one large dose and repeated small doses.

* Münchener Medizinische Wochenschrift, 1925, May 15, p. 810.

DIVISIONAL REPORTS.

Lincs. and District Division.*

Mr. Lang's Demonstrations at Lincoln.

The autumn meeting of the above Division was held at Lincoln, on 8th October, and was the best attended of any for many years.

The following were present:—The President, Mr. H. Caulton Reeks (Spalding); Messrs. D. Cooper (Saxilby); C. Hartley (Lincoln); T. Hicks (Sleaford); J. A. French (Long Sutton); A. J. Hines (Grimsby); T. J. Keall (Hemswell); T. Knowles (Wisbech); W. W. Lang (Brigg); G. Lockwood (Peterborough); J. H. Poles (Whittlesea); E. Porter-Smith (Lincoln); F. H. Sugden (Grantham); H. Walpole (Metheringham); and H. C. Reeks, junr. (Spalding), Hon. Sec.

The following visitors were present:—Mr. J. S. S. Woodrow (Goole); and Mr. J. D. Fulton (Horncastle).

Apologies for absence were received from T. B. Bindloss (Long Sutton); C. W. Townsend (Long Stanton); T. Holmes (Bourne); and A. W. Dickinson (Crowland).

The main features of the afternoon's programme were the demonstrations by Mr. W. W. Lang, *viz.*:—ophthalmic and intradermal tuberculin tests and the treatment of endometritis in the cow. In accordance with what is now Hartley tradition, Mr. C. Hartley placed his premises at the disposal of the Association, procured the cows and did everything possible to make the meeting a success. The best thanks of the Division are due to him.

Fortunately—unfortunately for the owner—both cows were reactors to the double tuberculin test as well as fit subjects for the endometritis treatment, so that only two animals were necessary. The reactions were quite definite, the element of doubt being completely eliminated.

The technique of the treatment for endometritis was of special interest to the members present, great attention being paid to every detail.

The demonstrator pointed out that he had not yet had any great experience and that one could not hope to become expert all at once. The first cow proved this by retaining the whole of three pints of Lugol's solution (one per cent.), there being no return flow: there was also a considerable inrush of air through the catheter and the whole affair was so mystifying that it was decided to go on with the next animal rather than proceed further, as time was short.

(The demonstrator wishes the whole circumstances of this case reported, as an example of what may confront and perplex the beginner).

The second case was most suitable for demonstration purposes, with the possible exception that everything was altogether too easy. To the astonishment of all present (the owner included), gallons of purulent material were evacuated during the process of douching and, to the less experienced, at least, it was quite evident that all country practitioners will have to adopt this method of treatment. Instead of using iodoform and bismuth as recommended by Williams for prolonged disinfection of the uterus, Mr. Lang uses Dimol ℥i to the pint of liquid paraffin; he dissolves the first in a little warm water, adds glycerine ℥i and liquid paraffin *q.s.* and, so far as he can tell, the results are satisfactory. He objects to the odour of iodoform, its milk tainting properties, and the fact that it is now largely sold in the form of pessaries by the quack medicine firms.

(*Note.*—The demonstrator intimates that he saw both cows again on the 19th October and found the first cow none the worse, but rather better, while the second cow was found, on examination, to have hardly any pus in the uterus).

An important feature of the demonstration was the dress equipment, the smock used and the gum boots, which enabled Mr. Lang to be present at the rest of the meeting as if he had not seen a cow for weeks instead of just coming from what is not by any means a clean task.

The meeting was continued at the Albion Hotel, and the usual routine business carried out, after which an interesting discussion took place.

Mr. Lang told the members that the tuberculin reactions were, in his opinion, quite definite, and were similar to those obtained while testing under the Tuberculosis Order. He had had rather an interesting experience with Johnë's disease in four emaciated animals which showed no sign of diarrhœa. All reacted and were slaughtered, the *post-mortem* examinations disclosing that they were badly affected with the above disease. At first he was unable to satisfy himself that tuberculosis was present, but careful and minute examination of the lymphatic glands disclosed slight tuberculous lesions, so that he is satisfied that the tuberculin reaction was correct and not due to Johnë's disease, as he understands some are inclined to think. Mr. A. J. Hines was able to corroborate, having had a similar case.

Mr. Lang told the members that he did not know whether they were satisfied with their diagnostic abilities in tuberculosis, but he himself experienced great difficulty in some cases. Sometimes it did not matter so much, in a way, whether one's diagnosis was correct so long as the animal recovered, but, under the Tuberculosis Order, a *post-mortem* loomed ahead.

A condition met with occasionally in the udder was the cause, he believed, of his erroneously condemning two cows during his inspections under the Milk and Dairies Act (1922). He referred to corded lymphatics on the postero-internal aspect of the right-hind quarter in each of his two cases. Mr. E. J. Burndred (Blackburn) had informed him that the condition was due to streptococcal infection and Mr. C. H. Ducksbury (Sheffield), had vouchsafed the information that his results of the biological test of milk from such a quarter were negative.

The speaker strongly recommended the members to purchase *Meat Inspection Regulations, etc.*, by Gerald Leighton and published by William Hodge and Co.; it contained much useful information in a condensed form.

* Received on November 13th.

In connection with the treatment of endometritis, Mr. Lang said that, although he had not had much experience, he was in a position to state that, in one of his herds, out of seven cows treated for sterility, five were again pregnant.

The PRESIDENT, on behalf of the meeting, expressed his thanks to Mr. Lang for his very interesting demonstrations.

Mr. J. D. Fulton was nominated for membership.

H. C. REEKS, JUNR.,
Hon. Secretary.

Dumfries and Galloway Division.*

MEETING AT CARLISLE.

A meeting of the Division was held in Carlisle on November 3rd, 1925, at Messrs. Harrison and Hetherington's Botchergate Mart. Mr. R. Hudson, F.R.C.V.S., of Retford, was the demonstrator, and he had two subjects. The first was a crypt-orchid: a four-year-old Clydesdale. This operation was performed in a very able manner, and the procedure and points of interest lucidly explained. The second subject was a long standing case of poll evil. The animal was cast and chloroformed, and the affected part laid open, when it was discovered that there was some necrosis of the body of the second cervical vertebra. Communicating openings were made from each side, the diseased bone curetted, and the cavity packed. This completed the operations. The members then adjourned to the Crown and Mitre Hotel for lunch, after which the business meeting was held.

There were present Messrs. N. H. MacAlister (Kirkcudbright), President; Jas. Waddell (Castle Douglas), Vice-President; R. Hudson (Retford), Jas. Lindsay (Dumfries), W. J. Pollock (Lockerbie), A. J. Milligan (Annan), W. L. McKenzie (Annan), J. G. Bell (Carlisle), R. Craig Robinson (Carlisle), W. J. Little (Carlisle), W. T. Hewetson (Brampton), W. E. Armstrong (Wigton), R. Simpson (Cockermouth) W. Scott (Penrith), F. Croudace (Corbridge-on-Tyne), and A. Young (Hon. Secretary).

The PRESIDENT proposed a vote of thanks to Mr. Hudson for so kindly coming there that day and giving the surgical demonstrations.

This was seconded by Mr. MILLIGAN.

Mr. HUDSON, replying, said that he enjoyed these outings quite as much as any of the members present, and would only be too pleased at any time to do whatever he could to contribute to the well-being of the profession.

Mr. JAS. LINDSAY moved a resolution: "That this Division of the N.V.M.A. brings to the notice of the N.V.M.A. the position of, and asks for its assistance on behalf of, the part-time veterinary inspectors in Scotland in their case with the Ministry of Health for Scotland. Also that the N.V.M.A. should give its consideration to the Draft Bill of the Tuberculosis Order, which the Ministry of Health have circulated to County Authorities in Scotland; which recommends County Authorities to take over the administration of the recent Acts and Orders in the burghs within their areas, which would have the effect of entirely doing away with the Burgh Veterinary Inspectors in Scotland."

Mr. MILLIGAN seconded, and the resolution was carried unanimously.

The PRESIDENT moved: "That the N.V.M.A. be asked to use its influence in trying to get the salary at present offered by the County of Kirkcudbright, for a whole-time Veterinary Inspector, increased, as the salary (£400 per annum) offered at present is totally inadequate, considering that the county is one of the most important dairying counties in Scotland, which salary, if allowed to go unchallenged, will create a precedent for other counties in Scotland about to make similar appointments."

Mr. R. CRAIG ROBINSON seconded and the resolution was carried unanimously.

Mr. LINDSAY proposed: "That the Association give a donation of one guinea to the Garnett Memorial Fund."

Mr. R. CRAIG ROBINSON seconded, and it was unanimously agreed.

Mr. A. YOUNG proposed: "That the Association be financially responsible for a link in the official chain of office of the N.V.M.A. and that a donation of two pounds be given."

Mr. W. E. ARMSTRONG seconded the proposition, which was carried unanimously.

The Secretary read letters received from the N.V.M.A. relating to the scale of fees which the Council of that body had recommended for adoption by all Divisions, these being the fees paid to part-time inspectors under the Tuberculosis Order. After considerable discussion, the fees recommended as a minimum were agreed upon as suitable.

Mr. CROUDACE proposed a vote of thanks to the Association for holding this meeting in Carlisle, as it had given members south of the border an opportunity of being present.

Mr. BELL seconded.

The PRESIDENT proposed that the next meeting of the Association be held at Dumfries in the early spring.

Mr. WADDELL seconded the proposition, which was carried.

ELECTION OF OFFICE BEARERS.

The PRESIDENT proposed that the Secretary and Treasurer be re-appointed.

Mr. BELL seconded the motion, with which the meeting concurred.

On the proposition of the PRESIDENT, seconded by Mr. MILLIGAN, Mr. Jas. Waddell was elected President of the Division for the ensuing year.

Mr. J. G. Bell was elected as Vice-President.

Mr. J. Lindsay was appointed as auditor.

New Members: Messrs. R. Simpson, of Cockermouth, and W. Scott, of Penrith, were elected to membership of the Division.

The PRESIDENT proposed a vote of thanks to Messrs. Harrison and Hetherington for the use of the Mart, and that the Secretary write and convey the thanks of the members to the firm. This was seconded and carried.

* Received on November 14th.

Mr. HEWETSON proposed a vote of thanks to the retiring President, and this was carried with acclammation.

The proceedings then terminated.

A. YOUNG,
Hon. Secretary.

Southern Counties' Division.*

A DISAPPOINTING EXPERIENCE.

In response to a generally expressed wish at the summer meeting at Christchurch, the autumn gathering of the Division at Southampton, on Thursday, October 1st., partook of a social character, and the Honorary Secretary (Mr. John Facer) who, together with Mr. Edie, was entrusted with the arrangements, prepared an interesting and attractive programme, including visits to the "Mauretania" and to the Southern Railway's floating dock, the largest engineering work of this description in the world. The response was, however, most disappointing, only about a dozen people, including ladies, putting in an appearance.

The arranging of social gatherings of this nature always involves a great deal of time and labour, and the opportunity of being conducted over the floating dock, to say nothing of the visit to the "Mauretania," were privileges by no means easy to obtain, even when one is in close personal touch with the Railway and Steamship officials. Such a poor response must have been disheartening in the extreme both to Mr. Facer and Mr. Edie.

The President (Mr. E. S. Martin, of Christchurch), was accompanied by Mrs. Martin, and the others present were Mr. H. Edie, of Southampton; Mr. J. H. Ripley, of Hythe and Miss Ripley; Mr. C. Pack, of Lymington and Mrs. Pack; Mr. R. E. C. Bullen; and Mr. and Mrs. Facer.

Mr. Reah was deputed by Mr. Gilbert S. Szlumper (the Docks and Marine Manager of the Southern Railway) to conduct the party over the huge floating dock and explain the mechanism by which it is operated, and the visit to the "Mauretania" was rendered equally interesting by the courtesy of the Cunard Steamship Co.

On leaving the docks, the party returned to Price's Café, where tea was taken, Mr. Facer and Mr. Edie kindly acting as hosts.

A short business meeting followed under the Chairmanship of the President (Mr. E. S. Martin); and a telegram was read from Major Wood, of Parkstone, regretting his inability to be present and congratulating the President and Hon. Secretary upon attaining their majority in the Territorial Army.

Letters of regret at being unable to be present, were also read from Messrs. G. P. Male, F. W. Bullock, S. H. Slocock, J. W. McIntosh, J. Willett, G. Parr, H. Rockett, Major Hobday and Major Simpson.

The minutes of the last meeting, as published in the *Veterinary Record*, were taken as read and confirmed, after which Captain J. Fox, Mr. R. E. C. Bullen and Mr. A. Fowler, were proposed and seconded as members. It was also decided to hold the next meeting at Portsmouth on the second Thursday in December and, before the meeting dispersed, a vote of thanks was passed to Mr. Facer and Mr. Edie, not only for their work in arranging for the gathering, but also for their hospitality that afternoon. A vote of thanks was also accorded the Marine Manager of the Southern Railway.

* Received on November 17th.

Veterinary Medical Association of Ireland.

DISCUSSION ON MR. P. F. DOLAN'S "MEAT AND MILK INSPECTION" PAPER.

Mr. JOHN J. KELLY (from the Chair), paid a very high tribute to the President for his very interesting and practical paper. He pointed out that, in view of recent legislation in that country, the questions of meat and milk inspection dealt with by Mr. Dolan were of tremendous importance to the members of the profession, and he hoped they would claim that amount of attention from veterinarians which their gravity demanded. They were complex and difficult problems and of such a character as to warrant, beyond question, professional treatment. No doubt it would be a long time, probably a generation or two, before the situation could be thoroughly grappled with, and meat and milk producers made to realise their responsibility to the public; but it was for the profession to justify its existence in that respect by instructing and compelling producers in that country to put on the market meat and milk of a wholesome and nutritious quality. He invited a full and frank discussion on the many important features discussed in Mr. Dolan's paper.

Mr. HOWARD complimented Mr. Dolan on the very useful fashion in which he had treated meat and milk inspection. He had not many criticisms to offer concerning Mr. Dolan's suggestions *re* meat inspection. He feared, however, that it would be a considerable time before the profession would have much to say or do in the matter, as the whole question of what the arrangements were likely to be was still in the melting pot and, unfortunately, the country, after the trying time through which it had passed, was not able to afford the funds that would right away meet the expense of employing the number of veterinary surgeons necessary for the work of effectual supervision. They must just keep their eyes open and ensure that in any district where the work was taken up, the veterinary profession would have some say in the matter. He believed that if meat inspection was to be effective the animals should be inspected before as well as after slaughter. Otherwise, the inspection would, in his opinion, be only a farce. The inspection of animals before slaughter for meat uses was at least as important as inspection after they had been slaughtered. He urged also that the profession should advocate the establishment of public abattoirs in every town of any considerable size. In the larger towns and cities, where meat inspection would be a big proposition, it would never be thoroughly successful as long as private slaughterhouses were allowed. As regarded what was probably the more important question of milk inspection, Mr. Dolan directed his remarks almost entirely from the point of view of milk produced in a city

or suburbs of a place like Dublin. Mr. Howard expressed the hope that when the country had become really stable legislation would be introduced preventing the production of milk within the city of Dublin, because it would never be possible in the centre of a large city to produce other then contaminated milk. That was, perhaps, a very wicked statement to make, but it was almost unnecessary to discuss the matter. Milk should be produced amidst the natural surroundings of the cow. Mr. Dolan very properly stated certain points to be observed in helping to provide healthy milk supplies. First of all, the milk should be obtained from animals that were, as far as possible, sound and healthy themselves. Secondly, all the people that had to do with the handling of those animals in obtaining and distributing the milk should also be healthy. Thirdly, and of greatest importanee, the animals should be kept under conditions that would include healthy surroundings. It might be information to some of the members that it was exactly twenty years ago since he (Mr. Howard) had the pleasure of reading a paper at a meeting of the Public Health Congress which was then held in Ireland. All the recommendations that were still being urged were put forward at that period, but it had taken all that time to get one step forward. There were a few little matters in connection with the cow shed, suggested by Mr. Dolan, that could be improved upon. In his drawing, he recommended that the height of the bed above the channel should be about 6in. He (Mr. Howard) would suggest to Mr. Dolan that he should make the height at least one foot, and he would be surprised at the results. Six inches was little better than nothing, as the very first dropping would nearly reach to the top of the 6in., so that in the morning the cow would be practically surrounded by her own manure. He would insist upon the cow having her hind quarters and udder cleaned from the very first day that it was taken in from grass. They all knew that during the summer months when, in that country, all the cows could be kept outside, they were beautifully clean, and there was not very much shouting about the question of dirty milk because, unless people were very dirty themselves in their methods, they could obtain clean milk from clean cows. They had a very long way to go before the people would be educated in the methods of producing milk under ideal conditions. He remembered once visiting a dairy in a foreign country and seeing cows kept under conditions that would, at least, compare favourably with the conditions under which some of their best and most valuable racehorses were kept in that country. The cows were not allowed to be milked in the byres; there was a special milk house, with glazed-tiled walls, to which the cows were transferred during the milking period. The cows' tails were tied up to prevent them dropping into the manure or flinging it about with any chance of contaminating the milk. There could not be too much stress laid upon the necessity of cleanliness. In the matter of ventilation, there was a tendency in that country to ventilate at the cow's tail instead of at her head. There was no engineering difficulty in making a sufficient opening where the cows would be facing to allow both light and air into the byre. Unfortunately, their people did not value anything that they had not to pay for; they had plenty of light and air, and they did not value it half enough—at least the people who owned cows did not. If the people who milked cows were instructed in clean methods it would go a long way towards solving the question of securing a clean milk supply. If they would encourage the method of dry milking they would make a very great advance on the road to cleanliness. It was not necessary to wet the hands at any time. After one lesson in dry milking the milker would become quite successful at it in a very short time. Mr. Dolan recommended that, as a preliminary, the cow's udder should be washed in certain cases. Mr. Howard hoped he would again consider that suggestion. It might be possible to wash cleanly and go to the trouble of drying off, but Mr. Howard undertook to prove that the ordinary mortal would succeed in making filth and dirt, and if the pail was examined after the udder was so treated it would easily be discovered that the washing had not been a success. It was much better to give the udder and teats a rub with a dry cloth.

He did not presume to discuss the question of pasteurisation or sterilisation, but he was satisfied that if people could be got to produce clean milk from reasonably healthy cows, a solution of their difficulties would have been found. Every cow that might re-act to the tuberculin test did not of necessity give milk contaminated with tuberculosis bacilli and the percentage of cows that suffered from tubereulous udders was very small. They were fairly easily discoverable by veterinary surgeons and there ought to be no question about effecting their immediate removal from any herd of cattle used for the production of miilk. He was in complete agreement with Mr. Dolan that the ideal way of delivering milk was in bottles. It was hopeless to expect that milk carted round, as they saw it, in cans (which were not themselves always clean) and delivered at the various houses into vessels which were similarly of doubtful cleanliness, could be otherwise than unclean. Bottling would go a long way towards preventing further contamination, provided that the milk had been produced in decent circumstances and that it was bottled by clean people. As regarded the style of disc produced by Mr. Dolan, the cap seemed a very effectual safeguard against tampering: Mr. Howard thought, however, that the ordinary disc was equally effectual, considering that the milk would be delivered by the producer direct to the consumer and not sold through the medium of the shop keeper. Mr. Howard agreed it was difficult to cope with the dishonest shop keeper. He again complimented Mr. Dolan, and impressed upon the members the necessity for giving a good deal more attention to this matter than had been given to it in the past.

The Chairman then introduced Mr. A. C. Kirkpatrick, M.R.C.V.S., of Johannesburg, and invited him to address the members on the subject before the meeting.

Mr. KIRKPATRICK expressed his appreciation of Mr. Dolan's paper, especially that part dealing with meat inspection, as he was connected with the Municipal Abattoir in Johannesburg, the largest institution of its kind in Africa. All meat consumed in Johannesburg was slaughtered at the central abattoir or other abattoir approved by the Council. Meat from an animal slaughtered in a private slaughterhouse would not be allowed to be consumed in the town at all. The improvement of slaughtering centres consisted of going into the matter to ensure that there was a reasonable system of inspection adopted at the abattoir. The slaughtering in Johannesburg was on a very large scale—the monthly averages being 10,000 cattle, 20,000

to 30,000 sheep and 3,000 to 4,000 pigs. The inspection was made by lay inspectors with special training and their powers were limited to seizure of suspected meat. They had no powers of condemnation—such power was reserved to the veterinary inspector and Medical officer. Meat passed by the inspectors was stamped, and all meat exposed for sale in butchers' shops must bear the official stamp. Each inspector was responsible for his own stamp, and each stamp was numbered, so that, if any case of disease arose, responsibility could be readily fixed upon the inspector who passed it. That system, needless to say, ensured that the greatest care was exercised by the inspectors. There was a system of *ante-mortem* and *post-mortem* inspection. He did not, however, consider that *ante-mortem* inspection was as valuable as inspection *post-mortem*—there being many conditions discoverable after slaughter that could not be previously detected. He believed that in most countries attention was devoted to the diseases which were common there; in South Africa more attention was paid to the detection of measles than to tuberculosis. Measles was found in cattle and swine—in cattle the average was .9 to 1 per cent.; in pigs from .6 to .12, perhaps an average of .7 or .8—depending upon the locality.

The system of inspection for the detection of measles was based upon regulations recently issued by the Scottish Authorities. Those regulatons recommended that animals affected with measles should be condemned outright. In South Africa that appeared too drastic. He referred to the arrangement for distribution—waggons under the control of butchers being used for the purpose and which must be kept thoroughly clean. The necessity for being just and fair to the owner was fully recognised in South Africa.

Another visitor, Mr. R. J. Roe, M.R.C.V.S., of Cyprus, on being invited by the Chairman to address the meeting, said that meat inspection in his country was not as yet seriously taken up, but it was hoped that in a couple of years it would be taken over by him. If so, the question would arise of appointing some inspectors who would probably be lay inspectors holding sanitary certificates. In this regard, he would be glad if Mr. Dolan would give some information as to where the Scottish Board of Health regulations could be obtained. He was more familiar with milk inspection, as it came under his immediate control. In one farm owned by the Government he found something like 70 per cent. of milch cows affected with tuberculosis, and as the milk was being used by the public, it became necessary to do something to protect them. Pasteurisation was carried out in a large milk shop. Milk was placed in a vessel sitting in a boiler and brought up to the required temperature and kept at that for about twenty minutes and then put into a cooling tank. The milk was then delivered from the tank. The bottle system was then introduced and they had difficulties ever since. Their bottles were bad; they were easily cracked or broken. The milk was sent out and the bottle broken on the way from the farm to the town four miles away. The milk, after being strained, was put into bottles and these were then put into a large container and left there for twenty minutes and then cooled as rapidly as possible. There were constant complaints. He was rather at a loss to account for the fact that that milk, which had been pasteurised in sealed bottles, should go bad in a short time, and he would be glad to be enlightened. He thanked Mr. Dolan very much.

Mr. Donovan said he had experience of milk produced in the city and in the country, and he would far prefer to drink the milk produced in Dublin to milk from the country. In the first place, the transit from the country to the city took very much away from it, and the milking of cows on grass on a wet morning meant contamination of the milk. They were driven into a dirty corner for milking, and he held that the shed would be a surer guarantee that the milk would be produced under cleaner conditions.

Mr. Mulcahy expressed the view that the great drawback in their unfortunate country was the want of public abattoirs. Plenty of money was spent on many other things of far less importance. In towns of 10,000 population, there were from thirteen to fourteen private slaughter-houses—every one of them having different times for slaughtering, so that it was impossible systematically to inspect them. As regarded Mr. Dolan's cowshed, he asked what was the composition of the floor.

Mr. Dolan: Concrete—some cowshed floors are made of a special cork material.

Mr. Mulcahy would not under any circumstances have concrete under the fore part of the cow. The first two feet, at least, should have some soft material for the animal to stand on; in fact, clay would be suitable, provided it was picked up occasionally. The dimensions suggested by Mr. Dolan were those he (Mr. Mulcahy) would recommend, but he thought Mr. Howard's 9in. to 12in. drop was a great improvement on the 6in. indicated by Mr. Dolan.

Professor Kehoe thanked Mr. Dolan for his very compact and lucid paper on the subject presented for discussion. It covered the ground in a very thorough fashion. He also expressed his acknowledgments of the interesting observations made by Mr. Kirkpatrick and Mr. Roe.

He advocated a continuance of the discussion of the subject at future meetings, with a view to arriving at some effectual system of dealing with meat and milk inspection. Nothing should be left undone to secure the views of all the members on it.

The Reply.

Mr. Dolan thanked the members for the way in which they listened to his remarks. He was glad to hear Mr. Howard's points, but his statement that all cows should be removed from the city was a very big proposition. Mr. Howard gave no reasons for this grave statement. There were very great advantages in having cows in the city and the most important was that the Dublin people could get fresh milk. It was a well known fact that country milk was very unsatisfactory; but the unfortunate part of it was that there was not half sufficient milk produced in Dublin for the needs of the people, and they were compelled to take a large quantity from the country; the people who could afford it would buy city milk in preference. What happened at present was that the milk was driven to the country railway station at eight in the morning, and people were lucky if they got it in time for their tea that evening. The evening's milk from the country arrived at the railway terminus about twelve at midnight, and the people did not get it until the following morning, when it might be in a sour condition. The milk produced in the city could be more effectually controlled. With regard

to the drop from the floor of the cowshed to the channel, that was formerly one foot, and it was found very unsatisfactory and uncomfortable for the cattle. Experience had proved that a 6in. drop was more satisfactory and made it easier to keep the cows clean. Special milk houses were undoubtedly the ideal, but the question was, was it possible to have such in the present stringent times? Ventilation from behind was adopted because, as a rule, it could not be got in the front. Ventilation from the head walls was no doubt very good, but in most cases the head wall was the boundary wall of the premises next door, and the neighbour objected to the ventilation coming from the cowshed into his premises. As regarded dry milking, it was a very difficult thing to carry out. The only suggestion he (Mr. Dolan) would make would be to have a change of milkers. He was very glad to hear Mr. Kirkpatrick on the question of meat inspection, especially the particulars he gave as regarded measles. The meat regulations Mr. Roe inquired about were the Scotch meat regulations. Pasteurised milk in bottle was liable to go sour if the bottle was not properly sterilised, even it if was pasteurised at the proper temperature—and the temperature was a very difficult thing to regulate.

As regarded Mr. Mulcahy's remarks on the subject of the material in the flooring, Mr. Dolan agreed there was a good deal in what was said. Personally he had not seen much of swollen knees in milch cows; all dairy yards in Dublin had concrete floors in their sheds. The bedding was not cleaned down for the first two or three feet, so that there was always some bedding at the top. The cork material, no doubt, made a good form of flooring, but the price of it was prohibitive.

Hunter Breeding.

"The position in which hunter breeding finds itself at the end of the year is decidedly encouraging, and improvement may be looked for all along the line. The improved quality of the breeding classes and the general excellence of the shows have been the subject of general remark, and there is no doubt that much of that success is due to the policy and the perseverance of the Hunters' Improvement and National Light Horse Breeding Society.

"Another important matter—perhaps the most important of all—the location of brood mares, also continues to occupy the attention of the society. Twelve gift mares had been located during the year, and of these seven had foals, two were barren, and two located too late for service. The remaining mare was unsuitable for breeding and was put off. The society has formulated an excellent scheme for procuring more gift mares. The secretaries of the various hunts are to be approached and their committees asked to nominate one of their members to act as a local representative of the society, to secure suitable mares, otherwise destined for the kennels, as gifts for the scheme. This is an admirable plan, for there is not the least doubt that many mares have been put off that would have done good service at the stud.

"Prices for hunters during the year have been well maintained. A few of the most important sales may be mentioned. Major V. D. S. Williams's lot of half-a-dozen averaged 355 guineas, and the Whaddon Chase lot of nine averaged 346 guineas, and 50 more of the hunters sold at Tattersall's made from 300 to 590 guineas each. The best average for a stud was made by that of Mr. Lucas, sold by Messrs. Warner, Shepherd and Wade, the five making the handsome average of 528 guineas. Mr. Loder's stud of five averaged 358 guineas, and of the other horses sold at Leicester eight made 300 guineas and upwards."—*The Times.*

Foot-and-Mouth Disease.

National Farmers' Union Statement.

"The National Farmers' Union announces," says *The Times*, of November 27th, "that it is preparing, on the instructions of the representatives of its 59 county and over 900 local branches, a considered memorandum on the whole question of foot-and-mouth disease, but owing to the publicity given to three points in regard to the disease, the Union deems it desirable to make a preliminary statement.

"The points to which allusion is made are the question of the slaughter policy, the question of prevention or cure, and the question of restrictions in areas where foot-and-mouth disease exists. With regard to the first point, the union states that two Departmental Committees, presided over by Mr. E. G. Pretyman, have considered this matter and reported without reservation that the slaughter policy is the only means of keeping foot-and-mouth disease under control in this country. It is contended that, although there may be isolated instances of agriculturists who are against this policy, between 90 and 97 per cent. are in favour of it, and the union's statement quotes the evidence of farmers in support of this view.

"With regard to the second point, states the National Farmers' Union, the Government have set up a scientific committee to endeavour to find out a preventive for the disease. 'In respect to a cure,' states the Union, 'there is no difficulty, but when Mr. Lowenstein, backed by a master of hounds, and another supposed well-known agriculturist, puts forward the claim that he can introduce a gentleman from France who can cure the animals in a few hours, and render them immune from further attacks of the disease, one naturally turns to what is occurring in France. There one finds that in March of this year the number of outbreaks (not animals affected) that actually occurred was 505. This number went up to 1,641 in July, 1,999 in August, 2,351 in September, and 2,147 in October. In these circumstances it is surely fair to ask why, if the methods referred to are really as efficacious as is claimed, the spread of the disease in France referred to above has not been prevented.'

"On the third point, that of restrictions, the N.F.U. state that this question was carefully considered by the two Departmental Committees mentioned. Certain suggestions were made to the Ministry of Agriculture and Fisheries, all of which that Department have gladly and willingly carried out, and in reference to the suggestion of Mr. Robert Crawford, of Leicestershire, as to the 15-mile and the two-mile areas, a well known Norfolk agriculturist attended twice before the 1923-4 Committee with a plan prepared by his County on this question. The plan failed under cross-examination, and the witness himself admitted that it was impossible to put it into execution."

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The Ministry and its Slaughter Policy.

The *Morning Post* of November 24th contained the following:—

"'Any statement that the Ministry of Agriculture refuses to test alleged preventive or curative treatments for foot-and-mouth disease because it wishes to bolster up its slaughter policy,' said an official of the Ministry to the *Morning Post* yesterday, 'is based on an entire misapprehension of the attitude of the Ministry to these two methods of dealing with the scourge.

"'We say that slaughter alone, at the earliest possible moment after diagnosis of the disease, is the only method of preventing foot-and-mouth disease from getting uninterrupted entertainment in this country. That is why we do not entertain proposals to test this and that alleged cure or preventive when we are invited to do so.'

"The National Farmers' Union had the same thing to say, and it was pointed out that throughout the branches of this great organisation opinion was overwhelmingly

in favour of the slaughter policy—only in quite insignificant exceptions was its superiority as a weapon to fight the disease questioned. The great breed societies, too, were all in favour of slaughter. At last week's Council meeting of the Union every administrative county in England and Wales was unanimously in favour of it.

"The proposal to allow experiments in either preventive or curative treatment where an outbreak has occurred does not recognise, it is pointed out, that such a procedure is entirely incompatible with the slaughter policy now in force; and to permit such a course in Leicestershire (where the interests of hunting people are thought to have a good deal to do with the suggestion) would be to open the country to a very grave risk of farther infection.

"Even if an animal is cured, it may have already done great evil in passing on the fever of the disease while it was ailing, and this may happen even before the well-known symptoms are recognised.

"A scientific committee, with Sir William Leishmann at its head, is at work trying to get at the precise cause of the disease and to suggest the best way of escaping its ravages. It has issued an interim report which reveals the line of inquiry to be followed, but has not yet come to any conclusion. Until it does the Ministry is likely to carry on as now.

"The official attitude is clearly stated in the Report of the Pretyman Committee on the 1923-24 outbreak: 'The real trouble with foot-and-mouth disease is not its deadliness, but its extraordinary infectivity, and we do not have to consider its effect upon the animals actually attacked, but upon the flocks and herds of the United Kingdom as a whole. If foot-and-mouth disease were allowed to become endemic the total losses by breeders and farmers would be gigantic, and all stock-owners would be faced with a constant and recurring menace. *We are not out to treat sick animals, but to preserve healthy ones.*'

"The question of cure, indeed, is beside the mark altogether. And whereas it is claimed that a new method has been very successful in France, the returns show a continuous increase in outbreaks there.

"In this connection the Ministry of Agriculture had to say that, as has been pointed out in the *Morning Post* many times, foot-and-mouth is so far from being a deadly disease in itself, that the mortality from it may not be more than 5 to 10 per cent. where treatment is given. So much for cure. But when prevention is sought the results have been discouraging, and it is only prevention that can be effective against the spread of the disease.

"An ointment, however, potent, can hardly have that effect, and vaccine, tried in the 1923-24 disaster, was useless for prevention. 'The brief facts are that animals inoculated against foot-and-mouth disease with ———'s preventive on a Wednesday and inoculated with the virus of foot-and-mouth disease on Monday of the following week had visible signs of foot-and-mouth disease on Wednesday of that week.'

"It is not a little remarkable that the general public has made no protest against the slaughter policy. It is interested in the immense loss in flesh, calves and milk that an extensive outbreak incurs, and there is, of course, the danger to health that infected milk then carries, beyond the very rare cases of the communication of the disease to the human being.

"An infected animal is, to use the term of an official, a 'factory of disease germs.' Fifty years ago, when foot-and mouth disease was rife in this country, the losses to farmers in the period waves of the disease amounted to millions.

"The present outbreak, one is glad to be assured on authority, is not nearly so bad as that of 1923. Quicker notification is acknowledged, but in this there is much room for improvement. But there is now much better provision of slaughterers, a great gain when it is remembered that every day that an infected animal remains alive it is a serious menace. In 1923 sometimes a week elapsed between discovery and slaughter because the disease got ahead of the work of killing."

In a statement issued on Saturday, the Ministry of Agriculture give some of the salient facts relating to the disease. They state that most countries on the Continent are at the present time seriously infected with the disease. For example, in Holland in September there were no fewer than 7,823 premises infected, the number in May having been 923. In France the number was 2,351, against 629 in May. The disease is also very prevalent in Spain and Denmark. In this country, between September 25th and November 26th, there have been 188 premises affected, the total since January 1st of this year being 213.

* * * *

Action by Union of South Africa.

The High Commissioner for the Union of South Africa has received information that the importation into the Union of South Africa of cattle, sheep, pigs, and goats from England and Ireland has been prohibited as from November 17th on account of foot-and-mouth disease. If such animals were shipped on or before November 17th they may be permitted to land in the Union at the discretion of the Government, subject to such conditions or instructons as may be issued.

* * * *

The number of animals which had, on December 1st, been slaughtered since September 25th, totalled 15,364, of which 6,194 were cattle, 6,991 sheep, 2,152 pigs, and 27 goats. The estimated amount of compensation was £197,500.

Anthrax Case Prosecution.

At Eastleigh, recently, E. M. Christian, of Allington Farm, West End, was summoned (1) that between October 26th and 31st, having in his possession a certain heifer which was then ill, such illness resulting in its death, he did not at the time of death give notice with all practicable speed to a constable of such illness, as required by the Hampshire County Council (Diseases of Animals) Notification Regulations, of 1910; (2) that having in his possession certain animals suspected of suffering from anthrax, he did not, with all practicable speed, give notice of the fact, contrary to the Anthrax Order of 1910; and (3) that he did not comply with the conditions set forth in Form C of the first schedule of the Anthrax Order of 1910. He pleaded not guilty, and was defended by Mr. C. F. Hiscock.

Mr. J. B. Tutt, F.R.C.V.S., veterinary surgeon, of Winchester, said that on the 31st October he visited defendant's premises at Allington Farm, West End, having heard from his assistant. He found one sow dead, and three others affected. He saw defendant's son, and then waited for defendant. He said, "I found a heifer dead on the Monday previous, and thought it died from acorn poisoning. I found it in a meadow, and had it skinned, and the carcase was given to the pigs two days later." Witness took a swab from the dead sow. Asked if he could account for the origin of the disease, defendant said the previous Monday one of his heifers died in the field close to the farm, but there were a lot of oak trees there, and he thought it died from acorn poisoning. The heifer was brought to the farm and hung in the stable till October 29th, when it was cut up, and the whole of the carcase, except the head and skin, given to the pigs, including the entrails, and that day one of the pigs became bad, and he sent for Mr. Tutt. Witness served him with Form C, and explained the contents, the seriousness of the disease, and the necessity for isolating other cattle. A heifer, three sows, and a dog died. The heifer that died was with nine other heifers and twelve steers, which were

brought back to the sheds, where there were two young bulls, two heifers, and two steers. Also in a barn there were ten store pigs, and two sows. In the stable where the heifer had hung from Monday to Thursday there were twenty store pigs and a boar. Witness went on Tuesday, November 3rd, to have the premises disinfected, and in the stable he saw a large number of fowls, some roosting on the partitions where the heifer had been hung, and the sow lying dead, while other fowls were running in and out of the stable into the road. He told defendant of it, and said that under Form C it should have been prevented. He replied he would do his best, but it was a job. The premises were very dilapidated. Defendant had disinfected the premises to the satisfaction of the police.

Defendant said he had been a farmer for many years, and had had a large experience, but had never heard of farmers reporting death in every case. It was a general rule to report the death of a pig. He had a butcher to see the heifer when dead, and he came to the conclusion that it was oak poisoning. He thought he could say he was not served by a constable with a leaflet giving the symptoms of anthrax. E. M. Christian, jun., said the heifer that died belonged to him, and he did not know it was ill till he heard it was dead. He had no suspicion about the heifers. The butcher cut it up, and it was given to the pigs. A sow then died, and he sent for the vet., whose assistant came, and later on Mr. Tutt, who said it was anthrax. His father said he would report to the police, but Mr. Tutt said he would do that. In reply to the Court, witness said they found acorns inside the body.

Mr. Hiscock for the defence, said no one regretted the outbreak more than his client. He agreed it was very necessary to conform to the regulations, and that everything should be done to prevent it spreading. The first summons, however, appeared to have been issued under regulations issued by the Hampshire County Council, and dealt with notification where an animal was ill, and such illness resulted in its death. There was a broad distinction in the present case, because the animal had not been ill. No illness had occurred, the animal being, apparently, well one day, but dead the next. Before there could be notification there must be illness, but in this case there was none, and he, therefore, submitted that the regulations were not admissible. It was thought the animal died of acorn poisoning, which was very virulent, and Mr. Tutt had admitted that. With regard to the second summons, the animals were not suspected of having anthrax. The heifer died, and the pigs were fed on the carcase, and on October 28th a pig was found dead, when defendant's son immediately telephoned to Mr. Tutt, whose assistant arrived, and later Mr. Tutt himself. The latter told defendant it was anthrax, and he replied that he must notify it. There had been no evidence of illness of pigs. As to the third summons, relating to Form C, he contended defendant had done his best, but fowls were difficult to confine, and the little store pigs might have got through an opening. Defendant had complied with the Order to the best of his ability, and with his son had worked hard and disinfected the premises. The Bench retired, and on returning into Court the Chairman said they considered the cases had been proved, and defendant would be fined £15 in the first and £10 each in the second and third, with £1 1s. veterinary fee.

"Yes," the teacher explained, "quite a number of plants and flowers have the prefix 'dog.' For instance, the dog-rose and dog-violet are well known. Can any of you name another?"

There was silence, then a happy look illuminated the face of a boy at the back of the class.

"Please, miss," he called out, proud of his knowledge, "collie-flowers!"—*The Progressive Grocer.*

NOTES AND NEWS.

The Editor will be glad to receive items of professional interest in these columns.

Diary of Events.

Dec. 8th.—R.C.V.S., Written Examination.
" 9th.—Meeting of the Lancashire Division at the Grand Hotel, Manchester.
" 10th.—R.C.V.S., Oral Examinations commence.

In view of the interest aroused throughout the profession in the working of the Tuberculosis Order, and the Milk and Dairies (Amendment) Act, both of which have now been in operation for three months, the next issue of the *Record* will be enlarged and mainly devoted to the publication of papers and reports of discussions on this subject which have taken place at meetings of Divisions of the Association held during the period in question.

It is hoped that by the extensive interchange thus afforded our readers of experiences met with in the working of these measures, they will be assisted to meet present and future difficulties in their own spheres of activity concerning the Order and the Act. A further purpose will be served in enabling us to avoid the weekly reproduction, for a considerable period, of reports having relation to the same subject matter.

Steel Memorial Medal Award.

The Council of the Royal College of Veterinary Surgeons has awarded the Steel Medal for veterinary research to Professor S. H. Gaiger, who was recently appointed to the chair of the Care of Animals—Causation and Prevention of Disease—in the University of Liverpool. It is nearly twenty years since this medal was awarded by the Council to a member of Council. The award is made once in every three years.

Frank Garnett Memorial Fund.

Seventeenth List of Subscriptions.

	£	s.	d.
Amount brought forward from sixteenth list	418	16	0
Per Western Counties V.M.A., F. T. Harvey	0	10	6
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Donations should be made payable to the Frank Garnett Memorial Fund, and sent to the Hon. Secretary, 10 Red Lion Square, London, W.C.1.

Royal College of Veterinary Surgeons.

Obituary.

Williams, O. Trevor, "Glanaber," Llangefni. Graduated N. Edinburgh, 30th May, 1889. Died 24th November, 1925.

* * * *

A correspondent writes:—

"Mr. Trevor Williams was gifted with unbounded enthusiasm and was always untiring in his efforts for any cause which he took in hand.

"Twenty-three years ago he called the practitioners of North Wales together to a meeting at Llangefni and invited Major Hobday over to operate on a few cases. Thus was established the North Wales Division of the N.V.M.A.

"He was placed on the Commission of the Peace for the County of Anglesey in 1918 and sat on the Llangefni Bench.

"He served on the Llangefni Urban District Council from 1897, and was chairman for the two years, 1901-3. He passed away at the comparatively early age of 59, and leaves a widow and five daughters. Trevor will be sadly missed. He possessed a magnetic personality which attracted a host of friends."

The *Liverpool Daily Post* of December 1st, states:—

"The funeral of Mr. Trevor Williams, veterinary surgeon, Llangefni, was the occasion of a remarkable demonstration on the part of the county magistracy, of whom he was one, and of his fellow practitioners, not only in Anglesey, but from Liverpool and other places, and also of the Masonic fraternity, among whom he had for years occupied a prominent position. Over fifty Masons, members of his own (Cefni) Lodge, and other lodges, followed him to the graveside and participated in the Masonic funeral rites there, carried out by the Rev. W. J. Williams, Newborough, Chaplain of the Cefni Lodge.

"The short service at the house was conducted by the Revs. T. Smith, Rector of Llangefni, and Ieuan Williams, and the memorial service at Smyrna Independent Chapel was under the direction of the Revs. R. Thomas, Moelfre, Thomas Ellis Thomas, Coedpoeth, and E. B. Jones, Gwalchmai. At the close Mrs. Price played the 'Dead March' in 'Saul.'

"Members of the magistracy present were: Messrs. O. Geoffrey Jones, vice-chairman of the Llangefni Bench; John Jones, Menai Bridge; Dr. John Jones, Gwalchmai; H. O. Owen, Cefn Mawr; Hugh Thomas, Cemaes; R. J. Gardner, Valley; Owen Lewis, Bodfan; G. Muir, Aberffraw; and J. Parry Jones, Llanerchymedd and Mr. Walter O. Jones, Clerk of the Peace for Anglesey.

"Veterinary surgeons present were Messrs. Hugh Williams, Ty Croes; D. J. Elias, Pentraeth; W. Luther Jones, Menai Bridge; Owen Thomas, Llanerchymedd; L. W. Wynn Lloyd, Carnarvon; W. A. Savage, Bangor; Professor Montgomery, Bangor University College; and Professor Hughes, Liverpool."

Lamb Dysentery.

At a meeting of the sub-committee of the Northumberland Agricultural Society, charged with the duty of investigating non-notifiabla diseases of animals, held at Newcastle, on November 24th, Sir Stewart Stockman and Professor Gaiger outlined their plans for conducting investigations into lamb dysentery for the forthcoming lambing season.

These plans, in which Sir John M'Fadyean, of the Royal Veterinary College Research Institute, and Professor Buxton, of Cambridge, collaborate, aim at the discovery of the cause of the disease by mass experimental work among affected flocks, and include the trying of remedies which promise success.

The active help of stock-owners is hoped for, and an appeal is made to them to place their flocks and ground at the disposal of the research workers.

Spahlinger Serum.

Sir H. Barnston, Comptroller of the Household, replying, in the House of Commons on Monday, as representing the Minister of Agriculture, to Captain Bowyer, said that the Ministry had not itself made any test of M. Spahlinger's serum for the treatment of tuberculosis, or of any other specific of which the basis was kept secret and not submitted to scientific inquiry. It understood, however, that an investigation into bovine tuberculosis was being undertaken by a committee representative of certain agricultural and professional interests in Cheshire, where tests were being conducted with the co-operation of M. Spahlinger.

The Charges Against The R.S.P.C.A.

In answer to Mr. T. Thomson (Middlesbrough, W., L.), who asked whether, in view of the grave charges made by a Departmental Committee against the actions of the Royal Society for the Prevention of Cruelty to Animals and its denial of the same, the Government would take the necessary steps to secure a full enquiry in order that the public might know the truth of the matter, Sir H. Barnston, Comptroller of the Household (Chester, Eddisbury), said: No, sir. The Departmental Committee made a very thorough enquiry into the whole question of the export of horses, including methods of killing abroad. Evidence was given before the Committee by representatives of the Royal Society for the Prevention of Cruelty to Animals, which was carefully weighed by the Committee in framing their report. No new facts regarding the points complained of have subsequently been brought to light and my right hon. friend sees no occasion for further enquiry into the matter.—*The Times*, Dec. 3rd.

Army Veterinary Chief.

The retirement of Major-General W. D. Smith, C.B., C.M.G., D.S.O., on completion of his term of appointment as Director-General of Army Veterinary Services, is announced in the *London Gazette*. General Smith has been in charge of veterinary services at the War Office since 1921.

CORRESPONDENCE.

Sir Merrik Burrell and the London College Buildings.

To the Editor of The Veterinary Record.

Sir,—In the report of the Central Division Annual Dinner Sir Merrik Burrell, as a Life Governor of the College, told the members that it might be found necessary to come to the veterinary profession for its moral and possibly its financial support.

Most of us love the dingy old place and consequently we have been blind to its structural decay; nevertheless, I would venture to suggest to all graduates of our *Alma Mater* that we inaugurate a building fund by each donating a minimum of £1 and maxima in multiples of one pound.

Should this suggestion find favour with the graduates, perhaps the Secretary of the Camden Town College would consent to receive donations?

I would be pleased to give ten pounds to any fund which may be opened for the purpose of the re-building of the whole of the College.—I am, Sir, yours faithfully, Horace L. Roberts, F.R.C.V.S.

139A Handford Road, Ipswich.
1*st December*, 1925.

The Editor acknowledges the receipt of the following:—

Communications from Mr. R. E. Hoile, Captain W. L. Little, Mr. J. F. D. Tutt, and Captain A. Walker.

Report of a meeting of the Western Counties Division, from Mr. R. B. Nelder, Hon. Secretary. Report of a meeting of the Lancashire Division, from Mr. J. Spruell, Hon. Secretary.

National Veterinary Medical Association of Great Britain and Ireland.

EDITORIAL OFFICE: 10 Gray's Inn Square, London W.C.1.

All communications relative to the literary side of the Veterinary Record must be addressed to the Assistant Editor, "Veterinary Record," 10 Gray's Inn Square, W.C.1

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